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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,637

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Arjun Ramamurthy

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PROSKAUER ROSE LLP
ONE INTERNATIONAL PLACE
BOSTON, MA 02110

EXAMINER

OKEKE, IZUNNA

ART UNIT

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2432

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/797,637	RAMAMURTHY, ARJUN	
	Examiner	Art Unit	
	IZUNNA OKEKE	2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-9, 15-19, 21, 23, 27, 28, 34-37, 39, 40, 42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9, 15-19, 21, 23, 27-28, 34-37, 39-40 and 42-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 15, 34, 39, 40 and 42 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites in part, “receiving, by the presentation device, an updated shader instruction sequence, wherein the second updated shader instruction sequence includes instructions executable to store at least one of the decrypted information or the one or more pixels in a computer readable storage medium”. However, this is not disclosed in the specification nor supported by the disclosure. According to the specification, the presentation device, specifically the execution unit of the device receives uses the instruction sequence of the decode module to decode/receive the decrypted information. The execution unit then uses the instruction sequence of the pixel shader module to display the information or store it to a RAM for display. To store the information or direct it to a computer storage media, the execution unit uses the instruction sequence of the capture module (See Para 36 and 37). There is no support for “updated shader instruction sequence” or “second updated shader instruction sequence” because the instruction sequence of the pixel shader module is neither updated nor refreshed. The

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instruction sequence contained in the shader module is for displaying the information or storing in to a RAM for display (See Para 37). To store the information in a computer readable storage medium as recited in the limitation, the execution unit uses the instruction sequence of the capture module (See Para 36).

Claim 1 further recites in part, “installing, at the presentation device, the second updated shader instruction sequence on the shader module, wherein installation of the updated shader instruction sequence modifies at least a portion of the first shader instruction sequence”. This is also not supported or disclosed in the specification. As explained above, there is no “second updated shader instruction sequence which is installed at the presentation device”. Instead, as disclosed in Para 17, 35-37, the instruction sequence of the decode module is installed in the execution unit of the presentation device to receive/retrieve the decrypted information. That instruction sequence (decode module instruction sequence) in the execution module is then updated/modified with the instruction sequence of the pixel shader module to display the decrypted information. To store the information to a computer readable medium, the current instruction sequence in the execution module is updated/modified with the instruction sequence of the capture module which causes the information to be stored.

Claim 1 further recites in part, “executing, by the presentation device, the modified first shader instruction sequence on the shader module to: apply a visual effect to each of the one or more pixels; direct the one or more pixels with the applied visual effect to a display, and store at least one of the decrypted information or the one or more pixels with the applied visual effect in a computer readable storage medium”. This is not supported by the disclosure. As explained above, the instruction sequence of the pixel shader module is only operable to display the

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decrypted information or to store the information to a RAM for display. The **instruction sequence of the capture module is operable to store the decrypted information to a computer readable medium.** (Please see Para 35-37 and the function of the instruction sequence of the three modules (decode, pixel shader and capture modules) in the disclosure).

If applicant firmly believes the limitation in the amended claims are fully supported by the disclosure, then applicant is asked to kindly point out the particular portions along with explanation of how the specification provides support for the particular limitation because the disclosure as read and understood by the examiner fails to disclose what is recited in the claims. Applicant or applicant's representative is also welcomed to call the examiner at 571-270-3854 to request an interview for further clarifications.

Response to Arguments

3. Applicant's arguments have been fully considered but they are not persuasive. With respect to the 112 rejection above, examiner maintains the rejection with prior arts disclosed because the amendments are not supported by applicant's disclosure. Furthermore, as explained in the last office action, Fukushima's invention is directed to a presentation device having a decoder and storage module with instruction sequences which are operable to display the information or to store the information to a computer readable medium respectively.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-5, 7-9, 15-19, 21, 23, 27-28, 34-37, 39-40 and 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al. (US-6052506).

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a. Referring to claims 1, 15, 34, 39, 40 and 42:

Regarding claim 1 and similar claims 15, 34, 39, 40 and 42, Fukushima teaches a method for capturing decrypted information directed to a presentation device, the method comprising: receiving, by the presentation device, decrypted information, wherein the device includes software program a shader module containing a first shader instruction sequence executable to apply a visual effect to each of one or more pixels comprising a presentable representation of based the decrypted information and direct the one or more pixels to a display (Col 6, Line 49-56... first control signal (graphics control signal) to produce video signal to be output to a display); receiving, by the presentation device, an updated shader instruction sequence, wherein the second updated shader instruction sequence includes instructions executable to store at least one of the decrypted information or the one or more pixels in a computer readable storage medium (Col 7, Line 55-64.... Second control signal (storage control signal) to store the video signal in a computer storage medium); installing, at the presentation device, the second updated shader instruction sequence on the shader module, wherein installation of the updated shader instruction sequence modifies at least a portion of the first shader instruction sequence (Col 7, Line 55-64.... Second control signal (storage control signal) to store the video signal in a computer storage medium); executing, by the presentation device, the modified first shader instruction sequence on the shader module to: apply a visual effect to each of the one or more pixels; direct the one or more pixels with the applied visual effect to a display (Col 6, Line 49-56... first control signal (graphics control signal) to produce video signal to be output to a display), and store at least one of the decrypted information or the one or more pixels with the applied visual effect in a computer readable storage medium (Col 7, Line 55-64 and Col 9, Line

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3-29.... second control signal (storage control signal) to store the video signal in a computer storage medium).

a. Referring to claims 2, 16 and 35:

Regarding claim 2 and similar claims 16 and 35, Fukushima teaches the method of claim 1, wherein receiving decrypted information comprises: providing a certification to a process; and receiving decrypted information from the process (Col 7, Line 4-14... access controller for decrypting the signal according to provided keys).

a. Referring to claim 3 and 17:

Regarding claim 3 and similar claim 17, Fukushima teaches the method of claim 1, wherein receiving decrypted information comprises interacting with an executing process in a manner that implies certification (Col 7, Line 4-14... interacting with the access controller to supply the decrypted signal).

a. Referring to claims 4 and 18:

Regarding claim 4 and similar claims 18, Fukushima teaches the method of claim 1 wherein receiving decrypted information comprises receiving a presentable representation (Col 7, Line 4-27... decrypted information comprising presentable video signal).

a. Referring to claims 5 and 19:

Regarding claim 5 and similar claim 19, Fukushima teaches the method of claim 1 wherein receiving decrypted information comprises receiving a compressed content stream (Col 4, Line 49-64... compression of content stream).

a. Referring to claims 7, 21, and 27:

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Regarding claim 7 and similar claims 21, and 27, Fukushima teaches the method of claim 1, further comprising: retrieving, by the presentation device, a presentable representation of the one or more pixels with the applied visual effect the from the computer readable storage medium; encoding, by the presentation device, the one or more pixels with the applied visual effect in a compressed format; and storing, by the presentation device, the compressed format of the or more pixels with the applied visual effect in the computer readable storage medium (Col 7, Line 55-67 and Col 9, Line 23-51... reproducing video from the storage medium, processing the video and either displaying it or storing it back on the medium).

a. Referring to claims 8, 28 and 36:

Regarding claim 8 and similar claims 28 and 36, Fukushima teaches the method of claim 1, further comprising: converting, by the presentation device, the decrypted information into a compressed content stream; and storing, by the presentation device, the compressed content stream in the computer readable storage medium (Col 4, Line 58-60... compression of video signal to reduce the amount of data required for both storage and transmission).

a. Referring to claims 9, 23 and 37:

Regarding claim 9 and similar claims 23 and 37, Fukushima teaches the method of claim 1, further comprising: storing, by the presentation device, at least one of a display frame and an update frame associated with the decrypted information in the computer readable storage medium. (Col 9, Line 3-22... commands for both displaying and storing the decrypted video signal).

a. Referring to claim 43:

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Regarding claim 43, Fukushima teaches the method of claim 1, wherein the presentation device comprises a graphics processing unit located on a graphics adapter (Col 7, Line 15-28... base-band processor of decoder acts as the GPU for converting signals appropriate for display).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IZUNNA OKEKE whose telephone number is (571) 270-3854. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 270-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/IZUNNA OKEKE/
Examiner, Art Unit 2432

/Minh Dinh/
Primary Examiner, Art Unit 2432